

Application No.: 10/580,551
Art Unit: 4171

Amendment Under 37 C.F.R. §1.111
Attorney Docket No.: 062590

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings include changes to Figs. 5, 8, 9 and 10. Figs. 8-10 has the label "Prior Art" added, as suggested in the Office Action. Fig. 5 was amended to correct top and bottom reference numbers "121a" to --122a --.

REMARKS

Claims 1-7 are currently pending. Claims 2 and 3 are amended. Claims 4-7 are newly added. No new matter was added. For instance, claim 5 is supported by, for example only and not limited thereto, Figure 4 and the description of the gap portions 140a, 140b on page 16 of the specification. Claim 6 is supported by, for example only and not limited thereto, Figure 4 and the middle paragraph on page 15 of the specification. Claim 7 is supported by, for example only and not limited thereto, Figures 3, 5, and 6 and the description in the first paragraph on page 17 of the specification. Reconsideration of the claims is respectfully requested in view of the following remarks.

Claim Rejections - 35 U.S.C. §103

Claims 1-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over **Fiora** (US patent 6,014,909) in view of **Genter** et al. (US patent 5870928). The Office Action acknowledged that **Fiora**'s toothed wheels 28, 30, etc. disposed on the output shaft of the reduction gears are *not* scissor gears and cited the further reference to **Genter** for disclosure of a scissors gear. Regarding independent claim 1, the Examiner asserted that it would have been obvious for a person having ordinary skills in the art to modify **Fiora**'s gearing, *i.e.*, toothed wheels 28 and 30, with **Genter**'s scissors gear 58. However, this is incorrect.

Genter discloses a scissors gear 58 which is used in a gear train between a crankshaft 24 and a camshaft 32 of an engine system 20. That is, **Genter**'s scissors gear 58 is configured as an anti-lash gear which *rotates only in one direction*. More specifically, a reload for holding a gear

between the main and sub gears of the scissors gear 58 only needs to be applied in a rotating direction.

On the other hand, **Fiora's** toothed wheels 28 and 30 are used in an arm mechanism of an industrial robot. That is, the toothed wheel 28 and 30 are *required to rotate in both directions*.

It is submitted that one of ordinary skill in the art would not modify **Fiora's** toothed wheels 28, 30 with **Genter's** scissor gears 58. Doing so would render the modified combination inoperative. If **Fiora's** toothed wheels 28 and 30 are replaced with **Genter's** scissors gear 58, there will be a problem when the scissors gear 58 is rotated in a direction opposite to the direction in which the preload is applied. That is, because a preload is not suitably applied in the opposite direction, a rotational angle of a driven gear will be shifted from a rotational angle of a driving gear due to an influence of an elastic force of the springs resulting from the driving rotational force (although the tooth surfaces will contact each other). Therefore, one of ordinary skill in the art would not modify **Fiora's** toothed wheels 28 and 30 with **Genter's** scissors gear 58. For at least these reasons, the present claimed invention is not obvious over **Fiora** in view of **Genter**.

Dependent claims 2-7 also distinguish over the prior art for at least the reasons that independent base claim 1 distinguishes over the prior art. In addition, the dependent claims recite additional features not disclosed nor rendered obvious by the cited prior art.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

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If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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Attachments: Replacement Sheets of Figures 5, 8, 9 and 10